

WHAT IS CLAIMED IS:

1. An apparatus comprising:
 - a chassis to house a plurality of electronic cards;
 - a backplane housed in the chassis; and
 - 5 a fan housed in the chassis,wherein a first portion of the fan is lower than a top edge of the backplane, and
wherein a second portion of the fan is higher than the top edge of the backplane.
2. An apparatus according to Claim 1, the backplane comprising:
 - 10 a front side to receive the plurality of electronic cards; and
 - a rear side,wherein a portion of the rear side of the backplane is disposed between the first
portion of the fan and a portion of the front side of the backplane.
3. An apparatus according to Claim 1, further comprising:
 - 15 a second fan housed in the chassis,wherein the second fan is disposed between the fan and the backplane.
4. An apparatus according to Claim 3, wherein a first portion of the second fan is
20 lower than the top edge of the backplane, and
wherein a second portion of the second fan is higher than the top edge of the
backplane.
5. An apparatus according to Claim 1, further comprising:

an air diverter to divert air toward the first portion of the fan.

6. An apparatus according to Claim 5, wherein a first portion of the air diverter is higher than the top edge of the backplane.

5

7. An apparatus according to Claim 5, wherein the air diverter comprises an airfoil.

8. An apparatus according to Claim 1, the chassis further comprising:

an input plenum having a first height at a front of the chassis and a second height at a
10 location between the front of the chassis and a rear of the chassis, the first height being greater than the second height; and

an output plenum having a third height at the rear of the chassis and a fourth height at a location between the rear of the chassis and the front of the chassis, the third height being greater than the fourth height,

15 wherein the fan is disposed in the output plenum.

9. An apparatus according to Claim 8, wherein the input plenum comprises a lower surface, and further comprising:

a second chassis to house a second plurality of electronic cards, the second chassis
20 comprising:

a second output plenum comprising a plenum divider and having a fifth height at a rear of the second chassis and a sixth height at a location between the rear of the second chassis and a front of the second chassis, the fifth height being greater than the sixth height,

wherein the plenum divider of the second output plenum comprises the lower surface
25 of the input plenum.

10. An apparatus according to Claim 9, further comprising:
a second backplane housed in the second chassis; and
a second fan disposed in the second output plenum,
wherein a first portion of the second fan is lower than a top edge of the second
5 backplane, and
wherein a second portion of the second fan is higher than the top edge of the second
backplane.

11. An apparatus according to Claim 9, wherein the output plenum comprises a
10 plenum divider, and further comprising:
a second chassis to house a second plurality of electronic cards, the second chassis
comprising:

a second input plenum comprising an lower surface and having a fifth height at a
front of the second chassis and a sixth height at a location between a rear of the second
15 chassis and the front of the second chassis, the fifth height being greater than the sixth
height,

wherein the plenum divider of the output plenum comprises the lower surface of the
second input plenum.

20 12. An apparatus according to Claim 11, further comprising:
a second backplane housed in the second chassis; and
a second fan housed in the second chassis,
wherein a first portion of the second fan is lower than a top edge of the second
backplane, and
25 wherein a second portion of the second fan is higher than the top edge of the second
backplane.

13. An apparatus according to Claim 8, further comprising:

an air diverter to divert air toward the first portion of the fan.

5 14. An apparatus according to Claim 13, wherein a first portion of the air diverter is higher than the top edge of the backplane.

15 15. An apparatus according to Claim 1, wherein the fan is removable from a front of the chassis.

10

16. An apparatus according to Claim 15, wherein the fan is rotatable towards the front of the chassis.

17. An apparatus comprising:

15 a chassis to house a plurality of electronic cards, the chassis comprising:

an input plenum having a first height at a front of the chassis and a second height at a location between the front of the chassis and a rear of the chassis, the first height being greater than the second height;

20 an output plenum having a third height at the rear of the chassis and a fourth height at a location between the rear of the chassis and the front of the chassis, the third height being greater than the fourth height; and

a fan disposed in the output plenum.

18. An apparatus according to Claim 17, further comprising:

25 an air diverter to divert air toward a first portion of the fan.

19. An apparatus according to Claim 18, further comprising:
a backplane to receive the plurality of electronic cards,
wherein a first portion of the air diverter is higher than a top edge of the backplane.

5

20. An apparatus according to Claim 18, wherein the air diverter comprises an
airfoil.

21. An apparatus according to Claim 17, wherein the output plenum comprises a
10 plenum divider, and further comprising:

a second chassis to house a second plurality of electronic cards, the second chassis
comprising:

a second input plenum comprising an lower surface and having a fifth height at a
front of the second chassis and a sixth height at a location between a rear of the second
15 chassis and the front of the second chassis, the fifth height being greater than the sixth
height,

wherein the plenum divider of the output plenum comprises the lower surface of the
second input plenum.

20 22. An apparatus according to Claim 17, wherein the input plenum comprises a
lower surface, and further comprising:

a second chassis to house a second plurality of electronic cards, the second chassis
comprising:

a second output plenum comprising a plenum divider and having a fifth height at a
25 rear of the second chassis and a sixth height at a location between the rear of the second
chassis and a front of the second chassis, the fifth height being greater than the sixth height,

wherein the plenum divider of the second output plenum comprises the lower surface of the input plenum.

23. An apparatus according to Claim 17, wherein the fan is removable from a front
5 of the chassis.

24. An apparatus according to Claim 23, wherein the fan is rotatable towards the front of the chassis.

10 25. A system comprising:
a chassis to house a plurality of electronic cards;
a backplane housed in the chassis;
an Ethernet interface coupled to the backplane; and
a fan housed in the chassis,
15 wherein a first portion of the fan is lower than a top edge of the backplane, and
wherein a second portion of the fan is higher than the top edge of the backplane.

26. A system according to Claim 25, the backplane comprising:
a front side to receive the plurality of electronic cards; and
20 a rear side,
wherein a portion of the rear side of the backplane is disposed between the first portion of the fan and a portion of the front side of the backplane.

27. A system according to Claim 25, the chassis further comprising:

an input plenum having a first height at a front of the chassis and a second height at a location between the front of the chassis and a rear of the chassis, the first height being greater than the second height; and

an output plenum having a third height at the rear of the chassis and a fourth height at a location between the rear of the chassis and the front of the chassis, the third height being greater than the fourth height,

wherein the fan is disposed in the output plenum.

28. A system according to Claim 27, wherein the input plenum comprises a lower surface, and further comprising:

a second chassis to house a second plurality of electronic cards, the second chassis comprising:

a second output plenum comprising a plenum divider and having a fifth height at a rear of the second chassis and a sixth height at a location between the rear of the second chassis and a front of the second chassis, the fifth height being greater than the sixth height,

wherein the plenum divider of the second output plenum comprises the lower surface of the input plenum.

29. A system comprising:

four electronic card chassis, the four electronic card chassis comprising respective ones of:

a backplane; and

a fan housed in the chassis,

wherein a first portion of the fan is lower than a top edge of the backplane, and wherein a second portion of the fan is higher than the top edge of the backplane; and

a component rack to support the four electronic card chassis.

30. A system according to Claim 29, wherein the component rack is to support components having a total height of 42U or less, and wherein a height of at least one of the
5 four electronic card chassis is less than 11U.

31. A system according to Claim 29, at least one of the electronic card chassis comprising:

an input plenum having a first height at a front of the at least one electronic card
10 chassis and a second height at a location between the front of the at least one electronic card chassis and a rear of the at least one electronic card chassis, the first height being greater than the second height; and

an output plenum having a third height at the rear of the at least one electronic card chassis and a fourth height at a location between the rear of the at least one electronic card
15 chassis and the front of the at least one electronic card chassis, the third height being greater than the fourth height,

wherein the fan is disposed in the output plenum.